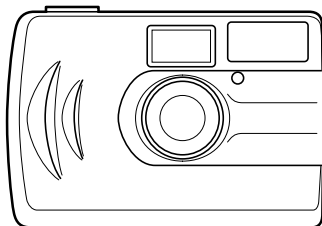


# JVC



**DUAL MODE DIGITAL CAMERA  
DUAL-MODUS-DIGITALKAMERA  
APPAREIL PHOTO NUMERIQUE DOUBLE MODE  
CÁMARA DIGITAL DE MODO DUAL  
DUAL MODE DIGITAL CAMERA  
DIGITALKAMERA MED TVÅ LÄGEN**

# GC-A33



**INSTRUCTIONS  
BEDIENUNGSANLEITUNG  
MANUEL D'INSTRUCTIONS  
MANUAL DE INSTRUCCIONES  
GEBRUIKSAANWIJZING  
BRUKSANVISNING**

**For Customer Use:**

Enter below the Model No. and Serial No.  
which is located on the bottom of cabinet.  
Retain this information for future reference.

**Model No.**

\_\_\_\_\_

**Serial No.**

\_\_\_\_\_

## “SOME DO’S AND DON’TS ON THE SAFE USE OF EQUIPMENT”

This equipment has been designed and manufactured to meet international safety standards but, like any electrical apparatus, care must be taken if you are to obtain the best results and safety is to be assured.

---

- Do** read the operating instructions before you attempt to use the equipment.
  - Do** ensure that all electrical connections (including the plug, extension cord and inter-connections between pieces of equipment) are properly made and in accordance with the manufacturer’s instructions. Switch off and withdraw the plug when making or changing connections.
  - Do** consult your dealer if you are ever in doubt about the installation or operation or safety of your equipment.
  - Do** be careful with glass panels or doors on equipment.
- 

- DON’T** continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way—switch off—withdraw the plug and consult your dealer.
- DON’T** remove any fixed cover as this may expose dangerous voltages.
- DON’T** leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure that your family know how to do this.  
Special arrangements may need to be made for infirm or handicapped people.
- DON’T** use equipment such as personal stereos or radios so that you are distracted from the requirements of road safety. It is illegal to watch television when driving.
- DON’T** listen to headphones at high volume as such use can permanently damage your hearing.
- DON’T** obstruct the ventilation of the equipment, for example with curtains or on soft furnishings.  
Overheating will cause damage and shorten the life of the equipment.
- DON’T** use makeshift stands and NEVER fix legs with wood screws. To ensure complete safety always fit the manufacturer’s approved stand or legs with the fixing screws supplied according to the instructions.
- DON’T** allow electrical equipment to be exposed to rain or moisture.

### **ABOVE ALL**

NEVER let anyone especially children push anything into holes, slots or any other opening in the case. This could result in a fatal electrical shock.  
NEVER guess or make changes with electrical equipment of any kind.  
It is better to be safe than sorry!

## FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION—** Changes or modifications not approved by JVC could void user's authority to operate the equipment.

### Contact

---

**Address:** JVC AMERICAS CORP.,  
1700 Valley Road, Wayne, New Jersey 07470

**Telephone:** (973) 315-5000

## INFORMATION (for CANADA)

This Class B digital apparatus meets all requirements of the Canadian Interference-causing Equipment Regulations.

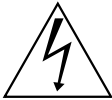

## RENSEIGNEMENT (Pour CANADA)

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

**WARNING:**  
**TO REDUCE THE RISK OF FIRE OR  
ELECTRIC SHOCK, DO NOT EXPOSE THIS  
APPLIANCE TO RAIN OR MOISTURE.**

**AVERTISSEMENT:**  
**POUR RÉDUIRE LES RISQUES D'INCENDIE OU  
DE CHOC ÉLECTRIQUE, NE PAS EXPOSER  
CET APPAREIL À LA PLUIE NI À L'HUMIDITÉ.**

## SAFETY PRECAUTIONS

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Thank you for purchasing this JVC product.  
Before you begin operating this unit, please read the instructions carefully to be sure you get the best possible performance.  
If you have any questions, consult your JVC dealer.

**ENGLISH INSTRUCTIONS** ..... Page 2 – 22

ENGLISH

Mit dem Kauf dieses JVC Produkts haben Sie eine gute Wahl getroffen.  
Um Ihren Kopfhörer optimal nutzen zu können, sollten Sie die vorliegende Anleitung vor Inbetriebnahme des Geräts sorgfältig durchlesen.  
Falls Fragen offen bleiben, wenden Sie sich bitte an Ihren JVC Händler.

**DEUTSCHE BEDIENUNGSANLEITUNG** ..... Seite 24 – 40

DEUTSCH

Nous vous félicitons d'avoir acquis ce produit JVC.  
Avant de vous en servir, lisez attentivement le mode d'emploi pour en obtenir les meilleures performances.  
Si vous avez d'autres questions, interrogez votre revendeur JVC.

**INSTRUCTIONS EN FRANÇAIS** ..... Page 42 – 58

FRANÇAIS

Gracias por adquirir este producto JVC.  
Antes de utilizar la unidad, lea cuidadosamente estas instrucciones para obtener el máximo rendimiento.  
Si tiene cualquier duda, póngase en contacto con su distribuidor de productos JVC.

**INSTRUCCIONES EN ESPAÑOL** ..... Página 60 – 76

ESPAÑOL

Dank u voor uw aankoop van dit JVC-product.  
Voor u met dit systeem begint te werken, verzoeken wij u de instructies zorgvuldig door te lezen om zeker te zijn dat u de best mogelijke prestaties bekomt.  
Mocht u nog vragen hebben, raadpleeg dan uw JVC-dealer.

**NEDERLANDSE GEBRUIKSAANWIJZING** ..... Biz. 78 – 94

NEDERLANDS

Tack för att du köpt denna JVC-produkt.  
För att få bästa möjliga ljudkvalitet, bör du läsa bruksanvisningen noggrant, innan du börjar använda enheten.  
Kontakta din JVC-försäljare om du har några frågor.

**SVENSK BRUKSANVISNING** ..... Sidorna 96 – 112

SVENSKA

# CAUTIONS

## About moisture condensation . . .

You may have observed that pouring a cold liquid into a glass will cause drops of water to form on the glass' outer surface. This same phenomenon occurs on the lens of the camera when it is moved from a cool place to a warm place, after heating a cold room, under extremely humid conditions or in a place directly subjected to the cool air from an air conditioner.

## Serious malfunctioning

If malfunctioning occurs, stop using the unit immediately and consult your local JVC dealer.

## Main Unit

---

### 1. For safety, DO NOT . . .

- .... open the camera's chassis due to high voltage inside.
- .... disassemble or modify the unit.
- .... allow inflammables, water or metallic objects to enter the unit.
- .... remove the batteries or disconnect the power supply while the power is on.
- .... look through the viewfinder directly at the sun or extremely bright light.

### 2. Avoid using the unit . . .

- .... in places subject to excessive humidity or dust.
- .... in places subject to soot or steam such as near a cooking stove.
- .... in places subject to excessive shock or vibration.
- .... near a television set.
- .... near appliances generating strong magnetic or electric fields (speakers, broadcasting antennas, etc.).
- .... in places subject to extremely high (over 40°C or 104°F) or extremely low (under 0°C or 32°F) temperatures.

### 3. DO NOT leave the unit . . .

- .... in places of over 50°C (122°F).
- .... in places where humidity is extremely low. (below 35%) or extremely high (above 80%).
- .... in direct sunlight.
- .... in a closed car in summer.
- .... near a heater.

### 4. To protect the unit, DO NOT . . .

- .... allow it to become wet.
- .... drop the unit or strike it against hard objects.
- .... subject it to shock or excessive vibration during transportation.
- .... keep the lens directed at extremely bright objects for long periods.
- .... carry it by holding the lens. Be sure to hold the main unit with both hands.
- .... swing it excessively when using the hand strap.

## Alkaline Battery

---

### 1. For safety, DO NOT . . .

- .... attempt to charge the alkaline battery.
- .... carry or store a battery with objects such as metal pens, necklaces, coins or hairpins. this could short circuit the positive ⊕ and negative ⊖ poles of the battery.
- .... heat or attempt to disassemble a battery.
- .... place a battery in water or in a fire.
- .... subject a battery to strong impacts, such as hitting it with a hammer, stepping on it or dropping it.

Any of these may cause the battery to split or leak, cause a fire or injury.

### 2. Use only the specified batteries with this camera. The use of other power sources may cause a fire.

## How To Handle A CD-ROM

---

- Take care not to soil or scratch the mirror surface (opposite to the printed surface). Do not write anything or put a sticker on either the front or back surface. If the CD-ROM gets dirty, gently wipe it with a soft cloth outward from the center hole using a circular motion.
- Do not use conventional disc cleaners or cleaning spray.
- Do not bend the CD-ROM or touch its mirror surface.
- Do not store your CD-ROM in a dusty, hot or humid environment. Keep it away from direct sunlight.

### Before Using the Camera

- Take some pictures on a trial basis before you actually start in order to make sure the picture(s) is(are) taken properly.
- We cannot bear any responsibility for an inability to shoot, record, or play back material normally in the event of a problem with this camera.
- We shall not be liable for any incidental, consequential or exemplary damages, loss of profits or any demand made by any third party due to your use of this product or the provided software.
- Store backups of important photos on a personal computer, etc. We cannot bear any responsibility for pictures stored in memory that are lost or altered.
- It is prohibited to use pictures taken with this camera for commercial purposes without the consent of the copyright owner.

\* Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

\* Other trademarks are the property of their respective owners.

# CONTENTS

<b>Fun Things You Can DO</b>	<b>9</b>
<b>Features</b>	<b>9</b>
<i>What's Inside</i> .....	9
<i>System Requirements (PC)</i> .....	9
<b>Getting to Know the Camera</b>	<b>10</b>
<b>Getting Started</b>	<b>11</b>
<i>Inserting Batteries</i> .....	11
<i>Attaching the Hand Strap</i> .....	12
<b>Taking Pictures</b>	<b>12</b>
<i>Status Light Indicator</i> .....	13
<i>Auto Power Off</i> .....	13
<b>Camera Operating Modes</b>	<b>13</b>
<i>Changing Modes</i> .....	13
<i>Camera Options</i> .....	13
<i>Camera Options in Record Mode</i> .....	14
<i>Camera Options in Delete Mode</i> .....	14
<b>Adjusting the Settings in Record Mode</b>	<b>15</b>
<i>Setting Picture Quality</i> .....	15
<i>Setting the Self-Timer</i> .....	15
<i>Setting the Auto Flash Mode</i> .....	16
<i>Setting the Exposure Value</i> .....	16
<b>Deleting Pictures from Memory</b>	<b>17</b>
<i>To delete a picture from Memory</i> .....	17
<i>To delete all pictures from Memory</i> .....	17
<b>Downloading Pictures into your PC</b>	<b>18</b>
<i>Connecting to your Computer</i> .....	18
<i>Camera Driver and Application Installation</i> .....	18
<i>Downloading and Saving Images to your Hard Disk</i> .....	19
<b>Using your Camera as a USB PC-Camera (WebCam)</b>	<b>20</b>
<b>Appendix 1: LCD Icons</b>	<b>21</b>
<b>Appendix 2: Camera Specifications</b>	<b>22</b>



This camera is an all-in-one pocket size digital and USB PC-camera. You can take digital pictures in an instant. You can also hook the camera to a computer and use it as a PC-camera for videoconferencing.

## Fun Things You Can Do

- Take digital pictures. Easily capture digital images and download them to your computer.
- Videoconference on the Internet. Keep in touch with distant family and friends. See and talk with people on the Internet face-to-face.
- Send image with e-mail. Send your captured images with your e-mail messages.

## Features

- Automatic Power Off to reduce energy consumption.
- TWAIN Acquire Module — Lets you download pictures from TWAIN-compliant devices like your camera to your computer (included in the software CD-ROM).
- Image Editing Software — Allows you to quickly and easily touch-up any photo captured with your camera. Helps enhance your pictures before emailing or printing them (included in the software CD-ROM).
- A built-in, non-expiring flash and an auto-flash sensor, automatically detects whether the flash should be engaged. It helps ensure that your pictures turn out right.
- Built-in digital memory gives a generous and flexible image storage capacity.

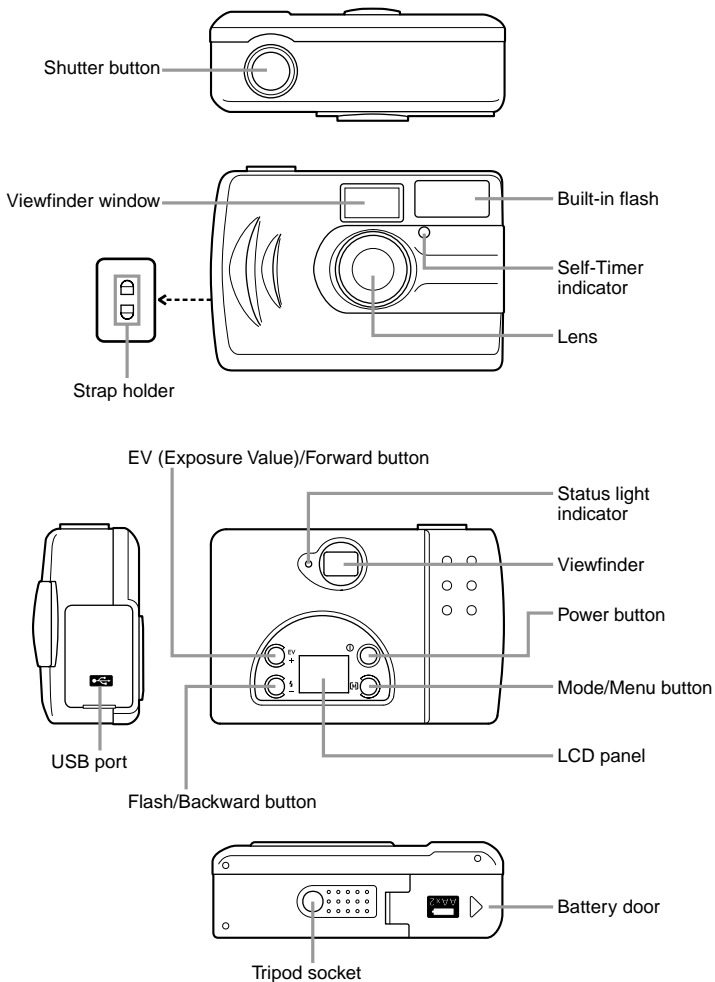
### What's Inside

- Digital Camera
- Driver & Application CD-ROM
- Quick Guide
- Instructions
- USB Cable
- Camera Pouch
- 2 x AA Alkaline Batteries
- Hand Strap
- Tripod

### System Requirements (PC)

- Microsoft® Windows® 98/98SE/Me/2000 (Pre-installed Model)
- Intel® Pentium® Processor or higher
- Free USB Port
- Minimum RAM : 32 MB
- 20 MB of available hard disk space
- Color display : VGA or better
- CD-ROM drive

## Getting to Know the Camera

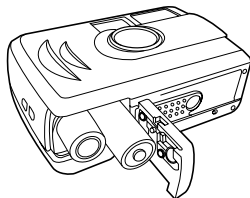


## Getting Started

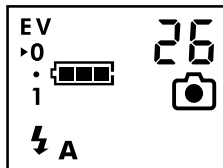
Before you start taking digital pictures with your camera, insert the (AA-size Alkaline) batteries. When you use your camera as a video camera for your PC, you won't need batteries. The camera absorbs power from your computer through the USB port.

### Inserting Batteries

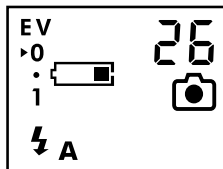
1. On the bottom of the camera, slide the battery door in the direction indicated by the arrow to open it.
2. Insert two (2) AA-size batteries as indicated on the inner side of the battery door.
3. Close the battery door and turn on the camera.



If you are using new batteries with your camera, the Battery Power icon on the LCD panel will be fully shaded.



After using the camera for some time and the battery power becomes low, only the lower portion of the Battery Power icon will appear shaded. This indicates that the batteries are weak and need to be replaced.



### Note

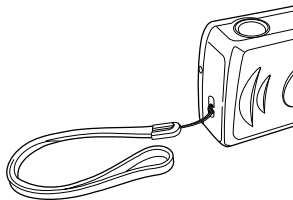
- Insert the batteries in the correct positive ⊕ and negative ⊖ polarities.
- Remove the batteries if the camera is not used for an extended period of time to prevent leaks or corrosion.
- Never use manganese batteries.
- Never mix old and new batteries.
- Low temperatures (under 0°C or 32°F) reduce the output efficiency of batteries, thereby shortening the operation time of the camera.
- The recommended battery is AA size alkaline battery.
- When discarding the batteries, cover the positive ⊕ and negative ⊖ terminals with adhesive tapes.

## Attaching the Hand Strap

Use the included hand strap every time to carry the camera and when taking pictures outdoors.

### To attach the strap to your camera:

1. Insert the small loop at the end of the strap into one of the holes of the camera's strap holder.
2. Push inward until the loop comes out of the other hole of the camera's strap holder.
3. Insert the other end of the strap through the loop and pull it all the way until the strap is securely attached to the camera.




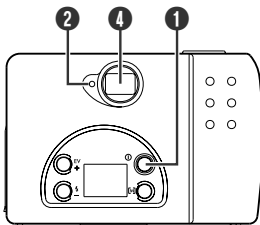
### Note

When using the hand strap, take care that the camera is not bumped or entangled.


## Taking Pictures

### To start taking pictures:

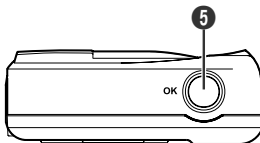
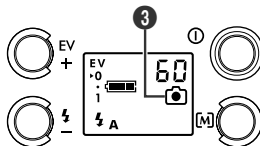
1. Turn the camera on by pressing the Power button.
2. As the camera warms up, the Status light indicator at the back of the camera lights in green.
3. Since this is the first time your camera is powered on, it automatically defaults to Record mode. You will see the  icon on the LCD panel.



### Note

If you have switched to other modes, you can change back to Record mode by pressing the  Mode/Menu button. You have to press and then quickly release this button.

4. Using the Viewfinder, focus on the object you want to capture.
5. Press the Shutter button to take the picture.



If you want to take more pictures, first look at the number shown on the LCD panel. This is the number of image shots left. As more pictures are taken, the number decreases. When it reaches zero, that means your digital camera is already full of images. If this happens, download the images into your computer and save them for later use. Then, erase all images from the camera's memory so that you can take more pictures. (See also "Downloading Pictures into Your PC".)

### Status Light Indicator

The status light indicator is located next to viewfinder window on the back of camera body. The indicator light can be seen as on, off or blinking. The indicator goes on and off to indicate the on/off status of camera. The indicator blinks when flash is being charged as auto flash feature been activated.

#### Note

Always wait for the light to stop blinking before you proceed.

### Auto Power Off

The camera is equipped with an automatic power off function. It switches off automatically when there are no operations performed for about 2 minutes. To restore full power, press the Power button on the back.

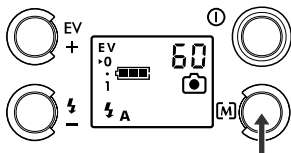
## Camera Operating Modes

Your digital camera has three operational modes:

- **Record mode** : Switch to this mode when taking digital pictures.
- **PC mode** : Switch to this mode to connect with PC.
- **Delete mode** : Switch to this mode to delete pictures.

### Changing Modes

Press the [M] Mode/Menu button located at the lower right corner of the LCD panel. Upon pressing, quickly release the button to change mode.



### Camera Options

Different sets of camera options are available under the Record and Delete modes. Switch to either mode with [M] Mode/Menu button.

## Camera Options in Record Mode

When you have set your camera to Record mode, you can control and change the following settings:

### ● Image quality settings

You can set the image quality setting to either Normal or Fine quality.

**N Normal Quality** — This is the acceptable image quality for digital pictures. At Normal quality, you can take a maximum of 120 pictures with the camera.

**F Fine Quality** — Captures images at the best possible quality. If you select this option, you can take 60 pictures at the most.

### ● Self-timer mode



**Turn off the Self-Timer** if you want to take pictures manually.



**Turn on the Self-Timer** if you want to set a 10-second delay when taking pictures. This is quite helpful especially if you want to take a picture of yourself and there is no one to help you. With the Self-Timer on, you can give yourself enough time to make your favorite pose before taking your own picture.

### ● Flash



**No Flash**

**Auto Flash**


You can set the flash off or auto, depending on the lighting conditions of your environment.


### ● Exposure Value (EV)

Allows your pictures with exposure increased or decreased. For more information on this camera setting, refer to the section, Setting the Exposure Value, in this manual.

## Camera Options in Delete Mode

While the camera is in Delete mode, you can control and change the following settings:

 **Delete Current Picture** — Select this option to remove the current picture from the camera's memory.

 **Delete All Pictures** — Select this option only if you are certain that you want to remove all pictures from the camera's memory. Do not select this option if you have not yet downloaded the pictures to your computer.

## Adjusting the Settings in Record Mode

The camera options listed in the previous section allow you to control how you want pictures to be taken and how to manage the pictures in the camera's memory.

**To change one or more camera options, here's what you should do:**

1. Press the **[M]** Mode/Menu button for over 2 seconds before releasing it.
2. Each option appears (shown by a continuous blinking) on the LCD panel one at a time. To go to the next option, press the **[M]** Mode/Menu button and release it instantly.
3. To select the option currently shown on the LCD panel, press the Shutter button. The camera is switched back to Record mode.
4. Repeat steps 1, 2 and 3 to view more options and make your desired selections.
5. To finish changing the camera settings, press the **[M]** Mode/Menu button for over 2 seconds to return to Record mode.

### Setting Picture Quality

Different elements combine to determine the quality of the pictures that you take.

- **Resolution:** The camera stores images at 640 X 480 resolution.
- **Compression:** The camera saves pictures using two levels of image compression: Normal (high compression) or Fine (low compression). Low compression produces higher quality images but less number of pictures can be taken. Higher compression produces acceptable quality images and allows more pictures to be taken.

**N** — Normal Quality (120 images)

**F** — Fine Quality (60 images)

**To select the picture quality:**

1. Make sure that the camera is in Record mode. Then, press the **[M]** Mode/Menu button for over 2 seconds to enter the camera options in Record mode.
2. To select normal quality, press the Shutter button when N blinks on the LCD panel.
3. To select fine quality, press the **[M]** Mode/Menu button and release it instantly. When F blinks on the LCD panel, then press the Shutter button to select the option.

### Setting the Self-Timer


The Self-Timer creates a 10-second delay between the time you press the Shutter button and the time the picture is taken. You can activate the Self-Timer by selecting the Self-Timer on option in Record mode. When the Self-Timer is selected, the Self-Timer indicator at the front of the camera lights in red. Pressing the shutter button turns on the Self-Timer. The Self-Timer indicator starts blinking, then blinks more quickly for the last 3 seconds.

After a picture has been taken, the Self-Timer sets off automatically. You will need to enter the camera options in Record mode and turn on the Self-Timer every time you want to use it.

 — Self-Timer Off



 — Self-Timer On

### To set the Self-Timer:



1. Make sure that the camera is in Record mode. Then, press the **[M]** Mode/Menu button for over 2 seconds to enter the camera options in Record mode.
2. Keep on pressing the **[M]** Mode/Menu button repeatedly until  blinks on the LCD panel.
3. Press the Shutter button to select the option.

### Setting the Auto Flash Mode

The camera has two different flash modes:

- **Off (default)**  : The flash is disabled no matter what the ambient brightness of the surroundings is.
- **Auto**  : The camera automatically fires the flash when the brightness of the subject or scene is too low.

### To set the Auto Flash mode:

1. Make sure that the camera is in Record mode.
2. Use the  - button to choose the Auto Flash mode (Auto ). The camera starts charging the flash and the Status light indicator blinks. The Status light indicator stays lit when the flash is charged and ready.

#### Note

- Do not fire the flash at a person at short range.
- Auto Flash is always reset to "OFF" when the camera is turned on.
- Auto Flash will be disabled automatically when connected on USB because the large charge current will cause damage to your USB interface.
- Do not use the Auto-Flash feature while battery power is low. (It will cause the camera to be kept in charging status always. Replace the batteries with new ones, then use the Auto-Flash feature.)

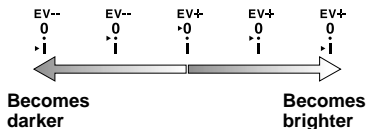
### Setting the Exposure Value

This camera automatically chooses the most appropriate Exposure Value (EV) for a given situation. However, the EV system can also be manually compensated as follows:

1. Make sure the camera is in Record mode.
2. The LCD panel shows the EV Compensation scale. Press the **EV / +** button (located at the left side of the LCD panel on the back of the camera) to select a higher or lower value.

#### Note

The effective EV Compensation range of this camera is from -1EV to +1EV in 0.5 EV steps.










## Deleting Pictures from Memory

There are times when you don't want the pictures you've taken because they're not what you wanted. In such case, you can simply delete them from memory.

### **To delete a picture from memory**

1. Make sure that you are in Delete mode. To enter Delete mode, press the [M] Mode/Menu button twice instantly and release the button. The Delete Current Picture icon  appears on the LCD panel.
2. Use the **EV / +** or the **1/-** button located at the back of the camera to select the number of the picture you wish to delete. The highest number is assigned to the latest picture.
3. Press the Shutter button.
4. If  icon starts blinking on the LCD Panel, press the Shutter button to confirm, or press any other button to cancel.
5. Press the [M] Mode/Menu button to switch back to Record mode.

### **To delete all pictures from memory**

1. Make sure that you are in Delete mode. To enter Delete mode, press the [M] Mode/Menu button twice instantly and release the button. The Delete Current Picture icon  appears on the LCD panel.
2. To Delete all the pictures in memory, press **EV / +** or the **1/-** button until  and "ALL" appears on the LCD panel.
3. Press the Shutter button to select Delete All.
4. If  icon starts blinking on the LCD Panel, press the Shutter button to confirm, or press any other button to cancel.

#### Note

If no picture has been taken yet, the camera does not enter the Delete mode.

## Downloading Pictures into your PC

Once you have your camera connected to your computer, the next step is to transfer the pictures contained in the camera memory to your computer's hard disk. Before you start download the pictures, you need to install first the appropriate camera driver and image editing software.

### **Camera Driver and Application Installation**

The appropriate TWAIN driver and application are required in order to download images from the digital camera to your computer. You need to install the TWAIN driver and application which comes with the included CD-ROM. It is implemented with auto-setup program. Once you insert CD-ROM disk into the CD-ROM drive, the installation menu will pop-up. Otherwise, you still can run "setup.exe" file in the root directory of CD-ROM driver.

#### **To install camera driver and application software:**

1. Insert the software CD-ROM disc into your CD-ROM drive.
2. The setup program will begin. Simply follow the on-screen instructions to complete both the TWAIN driver (Dual Mode USB Camera) and the image application software (MGI PhotoSuite) installation.
3. Restart the computer.

#### **Note**

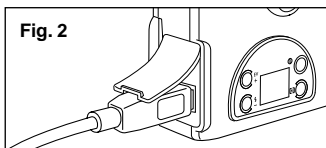
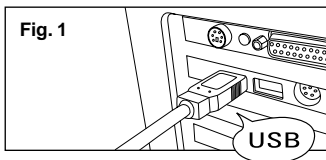
The TWAIN driver will only become effective after the system is rebooted.

### **Connecting to Your Computer**

Before you can start downloading images, you need to connect your digital camera to a computer.

#### **For USB interface:**

1. Plug one end of the USB cable into the USB port on a PC (**Fig. 1**).
2. Connect the other end of the USB cable to the camera (**Fig. 2**).
3. Turn on your camera.
4. Press the **[M]** Mode/Menu button to set the camera to **PC** mode.



#### **Note**

- When the camera is attached to your computer, all the functional buttons are disable.
- Use the dedicated USB cable comes with the package to connect the camera to your PC. Do not use this cable for other devices connection.

## Downloading and Saving Images to your Hard Disk

Once you have TWAIN driver and image application software installed on your PC, use the following procedures to transfer pictures from the camera to your computer's hard drive and save them. (The following procedure is the case when using MGI PhotoSuite III SE.)

1. Make sure your camera is set to PC Mode.
2. Launch the image application.
3. Click **Get**.
4. Click **Digital Camera (TWAIN)**.
5. Select **Dual Mode USB Camera** for the TWAIN device.
6. Click **Download**. The downloaded pictures will be displayed as reduced-size thumbnail images on the TWAIN interface.
7. Select the pictures you wish to save by clicking on them (hold Ctrl key for multiple selections). Selected pictures will be surrounded by a red border.

### Note



The way to select the TWAIN device and invoke the TWAIN driver interface may differ from each other, please refer to its respective software on-line help for more information.



MGI PhotoSuite III SE



TWAIN interface

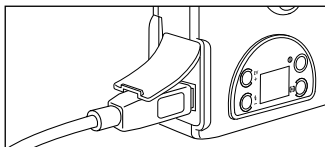
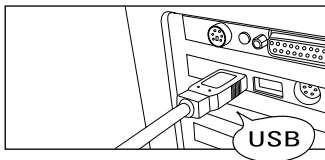
8. Now you have two options as to what to do with the downloaded images:
  - 8-1. Save selected pictures directly to your hard drive.
    - a. Click the **Save Photos to Disk Directory**  to bring up the Save Files to Directory windows.
    - b. Under Save In, select the directory in which you wish to save the pictures.
    - c. Type in a three-letter prefix followed by a number. This will be the filename for the first image. Filenames for all subsequent images in this batch will be consecutive. For example, if you choose "pic001" as the filename for the first image, the second image will be named "pic002", the third "pic003" etc.
  - 8-2. Open the pictures in Image Application Software.
    - a. Click the **Transfer Pictures to Application** . If **Photo** is selected from the pull-down menu in upper right corner, the selected images will be displayed as reduced-size thumbnail images. Select an image by double-clicking on it. This image can now be manipulated or enhanced before saving.
    - b. When you are ready to save the image, select **Save As** from the File menu.
    - c. Select which directory in which you wish to store the picture.
    - d. Type in the name for the picture to be saved.
    - e. Select Save as Type.
    - f. Click **Save**.
9. After finishing, be sure to turn off your PC first, then disconnect the USB cable from the camera and PC.

## Using your Camera as a PC-Camera (WebCam)

Aside from taking pictures, you can also use your camera as a PC-Camera (WebCam).

### Using your camera as a PC-camera (WebCam) with Microsoft Netmeeting:

1. Make sure you have installed the Dual Mode USB camera driver (refer to page 18).
2. Connect a USB cable to the camera and to your PC's USB port.
3. Press the **Power** button to turn on the camera.
4. Set the camera to **PC** mode.
5. Launch your PC-Camera (WebCam) Application Software.
6. Follow the instructions of the software.
7. After finishing, be sure to turn off your PC first, then disconnect the USB cable from the camera and PC.



#### Note






- No PC-Camera (WebCam) Application Software is included in the CD-ROM. Please use a commercially available videoconferencing program such as Microsoft Netmeeting. To use the camera for videoconference via the Internet or LAN connection, you also need a networking device such as a modem or TA (Terminal Adapter), as well as speakers and a microphone.
- For more information about the operation of videoconference application software, please refer to its respective software help.
- When the camera is attached to your computer, only the power and [M] Mode/Menu buttons can be used.
- If the camera does not work properly after connecting to a PC, remove the batteries once and insert them back into the camera, then try again.

## Appendix 1: LCD Icons





Here is a list of all the icons that appear on the LCD panel and what they mean.

### LCD panel Icons





#### Record Mode:

-  Record Mode
-  Full Battery Power
-  Medium Battery Power
-  Low Battery Power
-  No Flash
-  Auto Flash
-  Self-Timer Off
-  Self-Timer On
- F** Fine Quality Mode
- N** Normal Quality Mode
- EV** EV Compensation
-  Picture Remaining

#### PC Mode:

-  PC Mode
-  Full Battery Power
-  Medium Battery Power
-  Low Battery Power

#### Delete Mode:

-  Delete Current Picture
-  Delete All Pictures
-  Full Battery Power
-  Medium Battery Power
-  Low Battery Power
-  Current Picture
-  OK Confirmation

## Appendix 2: Camera Specifications

<b>Image Sensor</b>	: CMOS Image Sensor (329,000 total pixels, 312,000 effective pixels)
<b>Image Size (HxV)</b>	: 640 x 480 pixels
<b>Internal Memory</b>	: 8 MB Flash Memory
<b>Number of Storable Photos</b>	: 60 Images (Fine), 120 Images (Normal)
<b>Lens</b>	: Fixed Lens: F2.0, f=7.0 mm (equivalent to 45 mm on a 35-mm still camera)
<b>Optical Viewfinder</b>	: Built-in
<b>Working Range</b>	: 0.5m ~ Infinity
<b>Exposure</b>	: Auto
<b>White Balance</b>	: Auto
<b>Shutter</b>	: Electronic Shutter (Auto)
<b>Flash Mode</b>	: Auto, Off
<b>Self-Timer</b>	: 10 seconds
<b>Compression Method</b>	: JPEG Base
<b>LCD Indicator</b>	: Flash (Auto/Off), Self-Timer, Delete, Picture No, Battery, Record/PC Mode, Quality
<b>LED Indicator</b>	: Self-Timer LED (Red, in Front), Ready LED (Green, in Rear)
<b>USB Frame Rate</b>	: 15fps (VGA Mode); 30fps (CIF, QCIF) (Note: The performance of USB frame rate is relevant to the configuration of the PC.)
<b>Auto Power Off</b>	: 2 minutes after no operation (Disable when using USB)
<b>Communication</b>	: USB
<b>Power Supply</b>	: 2 AA-Size Alkaline Battery; DC 5V from USB Port
<b>Operating Condition</b>	: Temperature : 0°C – 40°C Humidity : 35% – 80% (without moisture condensation)
<b>Weight</b>	: Approx. 110 g (3.9 oz) without Battery
<b>Dimensions</b>	: 97 mm (W) x 65 mm (H) x 37 mm (D) (3-7/8" x 2-9/16" x 1-1/2")

\* Design and specifications are subject to change without notice.



GC-A33

Dual Mode Digital Camera

**JVC**  
VICTOR COMPANY OF JAPAN, LIMITED